



International School of Dakar
Dakar, Senegal

THREE-YEAR TECHNOLOGY PLAN

2008-2011*



Developed and presented by the Technology Committee:

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November 2008

**Academic years 2008-09, 2009-2010, and 2010-2011*

EXECUTIVE SUMMARY

In 2004, the Technology Committee at the International School of Dakar (ISD) began working on the first Three-Year Technology Plan in the school's history. This plan, which was completed in spring 2005 and fully implemented during the 2005-2006 school year, was the result of a commitment from the administration and school board to raising technology standards, which had never been formally assessed and addressed. Three years later, ISD enjoys a greatly improved Information Technology (IT) program.

The first Three-Year Technology Plan mainly addressed the issues of technology *infrastructure*. From 2005 through 2008, the school updated all hardware and accessories, and with very few exceptions all equipment is now less than two years old. A new Mac/PC lab opened in December 2007 and the school is now wireless over most of its area, with pending plans to increase network and internet speeds tenfold. These are just a few of the accomplishments during that time period.

ISD will continue to upgrade and refine its infrastructure. Many components of this second plan reflect the school's growth over the past few years and its changing technology needs as a result. But this second plan will also address the next crucial phase, technology *integration*. Attention will be given to providing ISD faculty and staff with high-quality professional development and access to up-to-date technologies in order to infuse technology into instruction. A technology curriculum which will integrate National Educational Technology Standards with ISD subject standards and benchmarks will be a collaborative effort between the Technology Committee and ISD teachers.

In order to best summarize and address the technology needs of the school community, the Technology Committee has divided this document into five sections, each representing a basic tenet of technology in education: *Communication, Technologies Integration, Technology Expectations for Staff, Enhancement of Instructional Space and Equipment, and Enhancement of Instructional Roles*.

The primary and overarching goal of the second plan is unchanged from the first – to achieve improved student learning and teacher instruction in all content areas, and to develop the technology skills essential to function in today's rapidly changing, information-rich world. The ISD technology committee is excited and eager to implement this next three-year plan, and firmly believes it to be in the best interest of the entire school community.

ISD MISSION STATEMENT AND PHILOSOPHY

The International School of Dakar (ISD) is an independent English-medium international school, which offers, in a nurturing environment, a rigorous, US-based, PK-12 curriculum enriched to reflect the needs and diversity of its international student body and faculty. ISD inspires students to become lifelong learners and responsible global citizens in a rapidly-changing world.

ISD believes that offering the best possible education program, curriculum, and instruction based on the highest standards will provide students the opportunity to maximize their potential. ISD believes quality education is attainable when students are valued as individuals in a community, prepared to think globally, and challenged to act responsibly.

Among the stated objectives within the school's mission statement is the technology-related goal of *orienting students to the world of technology and media, developing familiarity, competence, and awareness of the tools they will need as they continue their learning process beyond high school*.

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ISD TECHNOLOGY COMMITTEE MISSION STATEMENT

ISD recognizes that it must be fully committed to accommodate change – a commitment to staying current with changing technology as well as changing expectations of how students learn and how teachers teach.

Most importantly, ISD is committed to integrating technology into the school to facilitate student learning and to provide instructional support in order to:

- Produce life-long learners who will contribute positively to global society
- Enhance communication within the school community
- Promote critical thinking and problem-solving to enable students to effectively function in an increasingly complex and information-rich world
- Promote flexibility and collaboration within the school community
- Instill ethical and responsible behavior
- Define and sustain high expectations for the technology skills required by ISD staff and provide them with the support necessary to meet those expectations

INTERNATIONAL SCHOOL OF DAKAR

THREE-YEAR TECHNOLOGY PLAN

1 Communication

ISD is committed to using technology to enhance communication between and among students, parents, teachers, support staff, administrators, and the general school community.

GOAL	ACTION	TIMELINE
1.1 All faculty will use a new student information system	Purchase and implement	2008-09
1.2 All parents and students will have online access to classroom information	Investigate an alternative to Blackboard (Moodle, Collegebrain, etc) Pilot additional tools to showcase classroom information/events. Assess the level of usage by teachers, parents & students and increase it to make it effective	2008-09 2008-09 2009-10
1.3 All teachers will have all curricula linked to adopted school standards online	50% of teachers units on Rubicon Atlas All units on Rubicon Atlas	2008-09 2009-10
1.4 Teachers will be able to create and maintain voluntary education-related websites	Pilot web 2.0 technologies such as wikis, blogs etc., and train teachers to use them for sharing class related information	2008-09
1.5 An alternative communication tool will be considered in order to better meet the needs of the ISD network community	Technology Committee will research communication tools such as: Open Source, MS Exchange, Gmail, Skype If deemed appropriate, new tool will be piloted and implemented	2008-09 2009-10
1.6 All staff will have alternate professional email addresses to ensure continuity from year to year	Create ITDirector@isd.sn , etc.	2008-09
1.7 The application process for prospective students will be automated and simplified	Create and maintain an online enrollment form on ISD website linked directly into the ISD student database	2008-09
1.8 Up-to-date information will be more accessible to the ISD community	Redesign and update the ISD website to make it generally more informational and to accommodate changes in school-wide programs as needed Enable access to facility use information	2008-09 2008-09

1.9 Emergency communication procedures at ISD will be enhanced as appropriate.	Identify convenient messaging systems (more than one) to effectively communicate emergency information	2008-09
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2 Technologies Integration

ISD is committed to integrating technologies into workspaces, classrooms, and other instructional/professional spaces.

GOAL	ACTION	TIMELINE
2.1 All ISD teachers will have access to a technology curriculum linked to their subject curriculum to aid in classroom instruction	Create a PK-12 Technology Curriculum, integrating National Educational Technology Standards with existing ISD subject curricula and re-align the tech courses accordingly.	2008-10
2.2 Pursue the appropriate tech integration model (given below) for each division	Research and determine a schedule for infrastructure changes, policies and training prior to implementation	2008-09
a. Four student computers in every classroom in the elementary school	Develop a 3 year plan & prepare a budget for its implementation	2008-09
b. Laptops on Carts for MS	Implement the plan	2008-11
c. 1:1 Tablet program for the HS	Purchase hardware and software accordingly	2008-11
2.3 All staff will have continually improved access to a variety of instructional software/ Online resources	Already determined software purchases for first year of technology plan	2008-09
	Develop a software/skills matrix that will guide content-specific purchases	2008-11
	Survey staff and make recommendations of specific software	2008-11
	Purchase software and subscriptions to online resources as deemed appropriate by technology committee	2008-11
	Move towards more web-based resources	
	Purchase online versions of textbooks for student and teacher use	
2.4 Replaced computers will be placed into the community	Sell and donate as appropriate	2008-11

2.5 Increase communication with students	Establish student email accounts and encourage their use as a way of communication between students and teachers	2008-11
	Encourage use of server folders	2008-11
	Use age-appropriate web 2.0 technologies for effective collaboration and communication among the students & teachers.	
2.6 Introduce ID card system for students and integrate its usage for library check-out,	Identify and purchase a ID card printer that would integrate with the new SIS	2008-09
	Identify the requirements for integrating this with the Library and Cafeteria and implement them.	2009-10

3 Technology Expectations for Staff

ISD will define the technology skills and expectations for all staff and will provide the support necessary to meet these expectations.

GOAL	ACTION	TIMELINE
3.1 All staff will be technologically competent	Develop and apply a set of technology expectations with criteria for teachers' entry into ISD	2008-11
	Develop and apply expectations of continued growth in technology competence during employment at ISD	2008-11
	Develop a policy/testing model for testing staff technology competence	
3.2 All staff will annually define one or more professional technology goal.	At the beginning of each school year, include technology goals among stated goals of each staff member, with a clear plan of how they will achieve those goals	2008-11
	At the end of each school year, administration will follow up with each staff member to ensure that technology goals were achieved	2008-11
	Arrange experience/expertise sharing sessions among the staff to share and celebrate their experiences with technology.	
3.3 Necessary support will be provided for staff to meet their technology goals	Continue to offer regular professional development opportunities through SWEATT with a paid stipend for at least two workshops given per member	2008-11
	Develop a training model for staff and provide	

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	training time accordingly Develop a staff training calendar and implement it	
3.4 Continual assistance will be given to MS/HS teachers to adapt to the student use of laptops in classrooms	Provide training for teachers on how to best utilize this resource	2008-11
3.5 All staff will have easy access to technology workshop tutorials	Place all workshop tutorials in shared folder on server; update and manage appropriately Add video/online tutorials for staff members	2008-11

4 Enhancements of Instructional Space and Equipment

ISD is committed to including technology in teaching and learning. Learning environments should allow students and staff access to multiple resources in the classroom, the computer labs and the library media center.

GOAL	ACTION	TIMELINE
4.1 All computers four years old will be replaced	Teachers to get new computers will be given the option of laptops (depending on a reasonable cost difference) Purchase (locally) dual core machines and add dual platforms:	2008-09
4.2 Teachers will have easier access to laptop computers	Purchase 2 additional laptop computers for general use Provide teachers with option of laptop instead of desktop according to 4-year replacement cycle	2008-09 2008-11
4.3 All ISD teachers will be able to easily use computer multimedia projectors in their classrooms	Multimedia projectors to be permanently mounted on the ceiling in every classroom and configured to be used with the teacher's computer 33% of classrooms (X projectors) 67% of classrooms (X projectors) 100% of classrooms (X projectors)	2008-09 2009-10 2010-11
4.4 Introduce/pilot new technologies for classroom use	Purchase 3 SMART whiteboards: one each in ES, MS & HS. Add more SMART boards as appropriate	2008-09 2009-11

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4.5 Projector and laptop combination will be made more portable	Add more portable laptop/projector carts as needed	2008-11
	Make the classrooms projection-ready	2008-09
4.6 All networks and computers will have up-to-date firewall and security protection	Purchase and update as appropriate	2008-11
4.7 ISD staff will have increased multimedia capabilities in the classroom	Provide speakers & headphones for all class rooms and headphones for student computers in labs	2008-09
	Purchase 10 video cameras, 10 digital still cameras and 2 class sets of audio recorders for classroom use	2008-11
4.8 Upgrade library database configuration	Integrate Library Database with Focus	2008-09
4.9 Enable tech administrator(s) to manage network more easily	Research and purchase network management software that will specifically: track printer use and set printer allocations for all users, reset passwords and create accounts, monitor user accounts to ensure that network use agreements are followed at all times, etc	2008-09
4.10 Enhance instructional spaces for specific technology-related activities	Set aside and designate specialized areas to serve as video lab, media lab, etc. as appropriate	2008-11
4.11 Increase amount of computer lab space	Increase the computer accessibility/infrastructure according to the integration model and needs	2008-11
4.12 Create a replacement cycle for peripheral devices and ensure prompt replacement Provide for at least 3-5% spares	Purchase accordingly	2008-11
	Provide for 3-5% spares, while ordering.	2008-11
4.13 Licenses for software and operating systems will be maintained and upgraded	Look for School and Campus agreement for MicroSoft software and others & get educational discounts	2008-09
	Move towards web based systems and open source software.	2008-11
	Annual Licensing	2008-11
4.14 Server capabilities will be upgraded	Purchase new DNS server	2008-09
	Create a replacement cycle for servers and	2008-11

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	server components, so they are replaced in a regular fashion	
4.15 Network reliability will be improved on weekend and evenings	Purchase automatic reboot switch for network in the event of power failure	2008-09
4.16 Track toner use and introduce appropriate measures to reduce printing	Add Print control software on the network to track printing by staff and students.	2008-09
	Introduce Print room with network copiers	2009-10
	Move towards online portfolios/ electronic submission & grading	2008-11
4.17 Reliability and speed of network will be improved	Install optical fiber backbone for network and upgrade network components as appropriate	2008-09
	Increase internet bandwidth according to the need	2009-11
4.18 Improve network accessibility in library	Install network cabling in library classroom	2008-09

5 Enhancements of Instructional Roles

ISD is committed to maintaining an effective group of technology professionals to carry out the technology vision and mission statement.

GOAL	ACTION	TIMELINE
5.1 Sufficient opportunities will be provided to staff for professional development	Two members of technology committee will be funded to attend the annual Jefferson Overseas Schools Technology Institute each June	2008-11
	Provide training periodically for locally hired IT staff	2008-11
5.2 Enhance existing technology staff to accommodate expansion of school	Maintain general lab assistant position (local hire)	2008-11
	Hire a full-time systems technician assistant (local hire)	2008-11
5.3 Add/create tech positions as you go	Create a tech position chart and plan accordingly. Create and hire as needed	2008-11
	Redefine the tech teacher roles	2008-09
	Add Instructional tech coordinators at different levels	2008-11